

WHAT IS CLAIMED IS:

1. An image reading apparatus comprising:

5 a four line CCD sensor to receive a light reflected by a reading object and output either or both of a monochromatic image signal and a color image signal of R, G, and B; and

a correction circuit to execute shading correction for the monochromatic image signal and the color image signal;

10 wherein the correction circuit switches a correction operation of executing the shading correction for either or both of the monochromatic image signal and the color image signal of R, G, and B according to an image reading mode for the reading object or a reading state.

15 2. The image reading apparatus according to Claim 1, wherein said image reading mode includes at least one mode of a reading of the monochromatic image from the reading object, a reading of the color image from the reading object, an automatically selecting and reading either or both of the monochromatic image and
20 the color image from the reading object, and an continuously and automatically reading either or both of monochromatic images and color images from a plurality of the reading objects.

3. The image reading apparatus according to Claim 1,
25 wherein the reading state includes at least one of the time of turning on power, the start time of the image reading, the time of

continuously reading the reading objects but before starting reading each of the reading objects, the time of automatically switching reading of the monochromatic image or the color image, and the time of adjustment mode.

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4. The image reading apparatus according to Claim 1, wherein the four line CCD sensor is of a type of outputting the monochromatic image signal and the color image signal at the same time and there are a plurality of the correction circuits and each of the correction circuits executes the shading correction for the monochromatic image signal and the color image signal of R, G, and B.

5. The image reading apparatus according to Claim 1, wherein the four line CCD sensor is of a type of independently outputting the monochromatic image signal and the color image signal and the correction circuit executes the shading correction by sharing either of the monochromatic image signal and the color image signal.

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6. The image reading apparatus according to Claim 1, wherein the correction circuit, in a reading mode to read the monochromatic image, switches to an operation of executing the shading correction for the monochromatic image signal outputted from the four line CCD sensor and not executing the shading correction for the color image signal.

7. The image reading apparatus according to Claim 1,
wherein the correction circuit, in a reading mode to read the color
image, switches to an operation of not executing the shading
5 correction for the monochromatic image signal outputted from the
four line CCD sensor and executing the shading correction for the
color image signal.

8. The image reading apparatus according to Claim 1,
10 wherein the correction circuit, in a mode of automatically selecting
and reading either or both of the monochromatic image and the color
image, switches to an operation of executing the shading correction
for both the monochromatic image signal and the color image signal
outputted from the four line CCD sensor.

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9. The image reading apparatus according to Claim 1,
wherein the correction circuit, in a mode of continuously reading a
plurality of the reading objects, switches to an operation of
executing the shading correction on the white level for the color
20 image signal outputted from the four line CCD sensor.

10. An image forming apparatus comprising:
a four line CCD sensor to receive a light reflected by a reading
object and outputting either or both of a monochromatic image
25 signal and a color image signal of R, G, and B;
a correction circuit, according to an image reading mode for the

reading object or a reading state, switches an operation of executing a shading correction for either or both of the monochromatic image signal and the color image signal of R, G, and B outputted from the four line CCD sensor; and

- 5 an image forming unit to form an image on the basis of either or both of the monochromatic image signal and the color image signal for which the shading correction is executed by switching the operation of the correction circuit.